IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Peter Michael Gits and Dale J. Seavey

Confirmation No.:   1784

Serial No.:   09/676,147   Examiner: Victor D. Lesniewski

Filed: September 29, 2000   Group Art Unit: 2152

For: FULLY DISTRIBUTED, SCALABLE INFRASTRUCTURE
       COMMUNICATION SYSTEM

Date: May 15, 2006

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Responsive to the Office Action dated February 14, 2006, please amend the application
as follows.

Amendments to the Claims begin on page 2.

Remarks begin on page 7.

Amendments to the Claims

1.   (currently amended) A communication system, comprising:

at least one community, each community comprised of:

      a community service to manage the communication system, wherein managing the communications system includes registering distributed, persistent stores;

      at least one distributed, persistent store having publish and subscribe capability and communicating using a first protocol; and

      at least one double agent, operable to communicate with entities using a second protocol and the persistent store using the first protocol; and

at least one non-space specific double agent, operable to communicate with persistent stores outside the community using the first protocol by taking any objects from at least one persistent store in the community intended for a persistent store in another community and transferring the objects to the persistent store in another community.

2.   (previously presented) The communication system of claim 1, wherein the at least one double agent further comprises a universal double agent (UDA) capable of communicating with the persistent store and any entity.

3.   (previously presented) The communication system of claim 1, wherein the at least one double agent further comprises a morphing double agent (MDA) capable of adopting characteristics to communicate with any entity.

4.   (original) The communication system of claim 1, wherein the at least one double agent further comprises at least one device specific double agent.

5.   (original) The communication system of claim 1, wherein the at least one non-space specific double agent further comprises a determination agent.

6.   (currently amended) A method of providing communications, the method comprising:

establishing a distributed, persistent store having a publish and subscribe capability;

providing a community service to manage a communications system including the

persistent store, wherein managing the communication system includes registering persistent

stores and other members;

inserting an object into the persistent store using a first protocol to communicate with the

persistent store, wherein the object is generated by a double agent in communication with a

member of a Community using a second protocol requesting an action;

providing notification to subscribed members of the Community of the insertion of the

object into the persistent store; and

transferring objects from the persistent store in the Community to a persistent store in

another Community as necessary using a non-space specific double agent communicating with

the first protocol.

7.   (previously presented) The method of claim 6, wherein the method further comprises

reinserting objects intended for other spaces into the persistent store.

8.   (previously presented) The method of claim 6 wherein the persistent store, the double

agent and the subscribed members reside on at least two different computing devices.

9.   (original) The method of claim 6 wherein the object inserted includes a wrapper

addressed for a determination agent.

10.   (canceled)

11.   (currently amended) A computer-readable medium, wherein the medium includes

software code, that when executed, results in:

establishment of a distributed, persistent store having a publish and subscribe capability;

insertion of an object into the persistent store <u>using a first protocol to communicate with the persistent store</u>, wherein the object is generated by a double agent in communication with a member of a Community requesting an action;

providing notification to subscribed members of the Community of the insertion of the object into the persistent store; and

transferring objects from the persistent store in the Community to a persistent store in another Community as necessary <u>using a non-space specific double agent communicating with the first protocol</u>.

12.   (original) The computer-readable medium of claim 10, wherein the medium is comprised of at least two computing devices.

13.   (currently amended) A network device including a processor and a memory, the processor configured to:

establish a distributed, persistent store in the memory;

execute an agent to generate an object in response to a request from a member of a Community <u>using a second protocol to communicate with the member</u>;

provide a community service for registering persistent stores and agents within a community; and

insert the object into the persistent store <u>using a first protocol</u>, wherein the persistent store provides notification to subscribed members of the Community of the insertion of the object into the persistent store by taking any objects from at least one persistent store in the community intended for a persistent store in another community and transferring the objects to the persistent store in another community <u>using a non-space specific double agent communicating with the first protocol</u>.

14. (previously presented) The communications system of claim 1, further comprising a Dynamic Host Configuration Protocol object residing in the persistent store to provide network addresses to members of the community.

15. (previously presented) The communications system of claim 1, further comprising a Lightweight Directory Access Protocol object residing in the persistent store to provide a directory of services.

16. (currently amended) A method of providing communications, the method comprising:

receiving a telephone call from a first user;

using a double agent to generate an object representing the telephone call, wherein the object identifies a called party and the double agent communicates with the first user using a first telephone protocol;

inserting the object into the persistent store using a first protocol;

providing notification to subscribed members of the Community of the insertion of the object into the persistent store;

determining that the object is unresolvable by any member of the community;

transferring the object from the persistent store in the Community to a persistent store in another Community using a non-space specific agent communicating with the first protocol;

resolving the object in the other community; and

sending a call notification to the called party using a second telephone protocol.

17. (currently amended) A network device, comprising:

means for establishing a distributed, persistent store in the memory;

means for executing an agent to generate an object in response to a request from a member of a Community using a first protocol;

means for providing a community service for registering persistent stores and agents within a community; and

means for inserting the object into the persistent store <u>using a second protocol</u>, wherein the persistent store provides notification to subscribed members of the Community of the insertion of the object into the persistent store by taking any objects from at least one persistent store in the community intended for a persistent store in another community and transferring the objects to the persistent store in another community <u>using a non-space specific double agent communicating with the second protocol</u>.

Remarks

Claims 1-9 and 11-17 are pending.

Claims 1-9 and 11-17 are rejected.

Claims 1-9 11-13 and 15-17 are rejected under 35 USC 103(a) as being unpatentable over Slaughter et al. (US Patent No. 6,789,077), in view of Jagannathan et al (US Patent No. 6,496,871).

With regard to claim 1, the office action states that Slaughter teaches, "at least one non-space specific double agent, operable to communicate with persistent stores outside the community (Slaughter, figure 29, item 1250 and column 73, lines 34-36)." However, item 1250 is an external client that communicates with a client protocol that cannot communicate with the space 1254 using the space protocol without the user of the bridging agent 1252. Therefore, client 1250 is not even operable to communicate with the persistent store within the community, much less persistent stores outside the community.

Jagannathan does not address this issue, as there are no double-agents, much less non-space specific double agents. Further, an agent in Jagannathan includes objects, which is different from the relationships between agents and objects in the current invention as claimed and in Slaughter. In the invention as claimed, objects are manipulated by the agents, the agents do not contain the objects.

Indeed, since the agents of Jagannathan contain objects, the use of the transferring processes of Jagannathan would render the system of Slaughter inoperable. Slaughter depends upon the agents being able to generate and transfer objects outside of themselves. See Slaughter col. 13, lines 43-64 and col. 73, lines 34-63. This does not and cannot occur in Jagannathan. See Jagannathan col. 9, lines 44-55. Therefore, as there is no suggestion to combine Slaughter

and Jagannathan, and the combination would render Slaughter inoperable, the combination of these references is invalid.

Even if the combination were assumed to be invalid, the combination does not teach the invention as claimed in claim 1. Claim 1 has been amended to more clearly show that the persistent store communicates with a first protocol, the member of the community communicates with a second protocol. The double agent communicates with both protocols, and that the non-space specific double agent communicates with the first protocol (the persistent store protocol) with the different persistent stores.

As this is not shown, taught nor suggested by Slaughter, and Jagannathan does not address communication protocols, it is submitted that claim 1 and its dependents are patentably distinguishable over the prior art and allowance of these claims is requested.

With regard to claims 6, 11, 13 and 17, Slaughter does not teach that the object is transferred using a non-space specific agent, as Slaughter does not teach a non-space specific agent. Jagannathan does not teach non-space specific agents, much less ones that transfer objects. It is therefore submitted that claims 6, 11, 13 and 17 and their respective dependents are patentably distinguishable over the prior art and allowance of these claims is requested.

With regard to claim 16, Slaughter does not teach receiving a call and eventually connecting the party making the call with a called party. The text referred to by the Examiner in column 51, for example, deals with the client and the space communicating search results, not connecting a telephone caller with the called party. Claim 16 has been amended to more clearly state that the call is a telephone call and the ultimate result in connecting the calling party with the called party in a telephone call.

As neither Slaughter nor Jagannathan relate to telephone calls, it is submitted that claim 16 is patentably distinguishable over the prior art and allowance of this claim is requested.

Claim 14 is rejected under 35 USC 103(a) as being unpatentable over Slaughter in view of Jagannathan and further in view of Bahlmann (US Patent No. 6,487,594).

As discussed at length above, the combination of Slaughter and Jagannathan does not teach all of the limitations of the claimed invention. Bahlmann does not overcome the deficiencies set forth above. It is therefore submitted that claim 14 is patentably distinguishable over the prior art and allowance of this claim is requested.
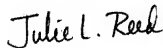
The prior art made of record and not relied upon has been reviewed and is not considered pertinent to Applicant's disclosure.

No new matter has been added by this amendment. Allowance of all claims is requested. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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